

Serial No.: 10/633,364

IN THE CLAIMS:

1. (Original) An organic light emitting device structure comprising:
 - a substrate;
 - a first electrode disposed over said substrate;
 - a polymeric layer comprising a conductive polymer disposed over said first electrode;
 - an organic region consisting essentially of small molecule material disposed over and in direct contact with said polymeric layer;
 - a second electrode disposed over said organic region; and,
 - a thin film encapsulation region disposed over said second electrode.
2. (Original) The organic electronic device structure of claim 1 wherein said organic electronic device structure is a flexible OLED device structure.
3. (Original) The organic electronic device structure of claim 1 wherein said first electrode is an anode and said second electrode is a cathode.
4. (Original) The organic electronic device structure of claim 3 wherein said anode comprises an indium-tin oxide layer.
5. (Original) The organic electronic device structure of claim 3 wherein said cathode comprises a lithium fluoride layer and an aluminum layer.
6. (Original) The organic light emitting device structure of claim 1 wherein said substrate is selected from a metal layer, a metal alloy layer, a semiconductor layer, a glass layer, a ceramic layer, and a polymer layer.
7. (Original) The organic light emitting device structure of claim 1 wherein said substrate is a composite material that comprises: (a) a polymer substrate layer, (b) a plurality of high-density layers, and (c) a plurality of planarizing layers, which high-density layers may be the same or

Serial No.: 10/633,364

different from each other, and which planarizing layers may be the same or different from each other.

8. (Original) The organic light emitting device structure of claim 7 wherein said substrate comprises at least three pairs of alternating high-density and planarizing layers.

9. (Original) The organic light emitting device structure of claim 1 wherein said thin film encapsulation region is a multilayer encapsulation region.

10. (Original) The organic light emitting device structure of claim 9 wherein the multilayer encapsulation region comprises a plurality of high-density layers and a plurality of planarizing layers, which high-density layers may be the same or different from each other, and which planarizing layers may be the same or different from each other.

11. (Original) The organic light emitting device structure of claim 10 wherein said multilayer encapsulation region comprises at least three pairs of alternating high-density and planarizing layers.

12. (Original) The organic light emitting device structure of claim 1 wherein said small molecule material comprises a small molecule emissive material.

13. (Original) The organic light emitting device structure of claim 12 wherein said small molecule material further comprises a small molecule hole injecting material.

14. (Original) The organic light emitting device structure of claim 13 wherein said small molecule hole injecting material comprises an organic metal complex.

15. (Previously presented) The organic light emitting device structure of claim 1 wherein said organic region is a multilayer region including an emissive layer.

Serial No.: 10/633,364

16. (Previously presented) The organic light emitting device structure of claim 15 wherein said multilayer region further comprises a small molecule hole injection layer.
17. (Previously presented) The organic light emitting device structure of claim 16 wherein said hole injection layer consists essentially of an organic metal complex.
18. (Previously presented) The organic light emitting device structure of claim 17 wherein said an organic metal complex is copper phthalocyanine.
19. (Previously presented) The organic light emitting device structure of claim 1, wherein said organic region is a multilayer region comprising a hole injection layer a hole transport layer disposed over said hole injection layer, an emissive layer disposed over said hole transport layer, a blocking layer disposed over said emissive layer, and an electron transport layer disposed over said blocking layer.
20. (Previously presented) The organic light emitting device structure of claim 1 wherein said conductive polymer is selected from polypyrroles, polyanilines, poly(p-phenylene vinylenes), polysulfones, polyacetylenes, and polythiophenes.
21. (Previously presented) The organic light emitting device structure of claim 20, wherein said polymeric layer comprises poly(3,4-ethylenedioxythiophene).
22. (Previously presented) The organic light emitting device structure of claim 21, wherein said polymeric layer further comprises a poly(styrene sulfonate).
23. (Previously presented) The organic light emitting device structure of claim 1, wherein said polymeric layer is spin coated.
24. (Previously presented) The organic light emitting device structure of claim 1, wherein said polymeric layer is ink jet printed.

Serial No.: 10/633,364

25. (Previously presented) The organic light emitting device structure of claim 1 wherein said first electrode is an anode comprising indium-tin oxide; wherein said polymeric layer comprises poly(3,4-ethylenedioxythiophene); wherein said organic region includes a hole injection layer adjacent to said polymeric layer, said hole injection layer consisting essentially of copper phthalocyanine; wherein said second electrode is a cathode; and wherein said encapsulation region comprises a plurality of high-density layers and a plurality of planarizing layers, which high-density layers may be the same or different from each other and which planarizing layers may be the same or different from each other.

26. (Currently amended) An organic light emitting device comprising (a) a polymer layer comprising a hole injecting conductive polymer and (b) a small molecule layer comprising a small molecule emissive material, wherein said organic light emitting device is a flexible organic light emitting device.

27. (Previously presented) The organic light emitting device of claim 26 wherein said small molecule layer further comprises a small molecule hole injecting material.

28. (Previously presented) The organic light emitting device of claim 27 wherein said small molecule hole injecting material comprises an organic metal complex.

29. (Previously presented) The organic light emitting device of claim 28 wherein said organic metal complex is copper phthalocyanine.

30. (Previously presented) The organic light emitting device of claim 26 wherein said conductive polymer is selected from polypyrroles, polyanilines, poly(p-phenylene vinylenes), polysulfones, polyacetylenes, and polythiophenes

31. (Previously presented) The organic light emitting device of claim 26 wherein said polymer layer comprises poly(3,4-ethylenedioxythiophene).

Serial No.: 10/633,364

32. (Previously presented) The organic light emitting device of claim 31 wherein said polymer layer further comprises poly(styrene sulfonate).

33. (New) An organic light emitting device structure comprising:

a substrate;

a metal oxide anode disposed over said substrate;

a polymeric layer comprising a conductive polymer disposed over said anode;

a small molecule hole injection layer disposed over and in direct contact with said polymeric layer;

an emissive layer disposed over said hole injection layer

a cathode disposed over said emissive layer; and

a thin film encapsulation region disposed over said cathode, said thin film encapsulation region comprising a plurality of high-density layers and a plurality of planarizing layers, which high-density layers may be the same or different from each other, and which planarizing layers may be the same or different from each other,

wherein said organic light emitting device structure is a flexible organic light emitting device structure.